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REMARKS/ARGUMENTS

Page 2 of the Office Action indicates that the Information Disclosure Statement filed on March 30, 2001 fails to comply with the provisions of 35 CFR 1.97, 1.98, and MPEP Section 609 because no copy or listing of a reference corresponding to the diagram and description of the line card on pages 1 and 2 of the IDS has been provided.

The Examiner is advised that pages 1 and 2 of the IDS as filed include all of the information available to the Applicants regarding the noted line card. It is therefore believed that the duty to disclose information under 37 CFR 1.56 has been satisfied.

Turning now to the claim rejections in the Office Action, claims 1 to 5 and 11 to 18 were rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki (United States Patent 6,330,239). However, Applicant believes that the rejected claims are patentable over Suzuki as discussed in further detail below.

According to page 3 of the Office Action, Suzuki discloses an exchange apparatus (IP-ATM node) for exchanging data between an ATM network and an IP network. The Office Action then points to Figures 9 and 10 of Suzuki as allegedly disclosing a data path for handling both cell and packet data received at an inputting portion for both packet data 11 and cell data 21, address solving portion 12/22, address converting portion 13/23, assembling portion 14/24, and outputting portion 16/26.

With reference to claim 1, a multi-service segmentation and reassembly integrated circuit is recited, comprising a first bus interface, lookup circuitry, segmentation circuitry, reassembly circuitry, a second bus interface, and a data path extending from the first bus interface to the lookup circuitry, from the lookup circuitry to the segmentation circuitry, from the segmentation circuitry to the reassembly circuitry, and from the reassembly circuitry to the second bus interface.

It is well-established that for anticipation under 35 U.S.C. 102, a reference must teach every aspect of a claimed invention. It is respectfully submitted that Suzuki does not teach every

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aspect of the invention as recited in independent claim 1.

Figures 9 and 10 of Suzuki respectively show an IP-ATM converting portion and an ATM-IP converting portion of an IP-ATM node. In Figure 9, an IP line inputting portion 11, an address solving portion 12, an address converting portion 13, an ATM cell-IP datagram assembling portion 14, a destination VPI/VCI setting portion 15, and an ATM line inputting portion 16 are connected in sequence. This sequence of components is not the sequence recited in claim 1. For example, although page 3 of the Office Action refers to the address converting portion 13 as "segmentation circuitry", there is absolutely no disclosure in Suzuki of a segmentation function being performed by the address converting portion 13.

Figure 10 of Suzuki, also referenced on page 3 of the Office Action, shows an ATM line inputting portion 21, an address solving portion 22, an IP datagram assembling portion 23, a destination line setting portion 24, and an IP line outputting portion 25 connected in sequence. This combination is also different from the invention recited in claim 1. The components shown in Figure 10 of Suzuki do not form a data path extending from a first bus interface to lookup circuitry, from lookup circuitry to segmentation circuitry, from segmentation circuitry to reassembly circuitry, and from reassembly circuitry to a second bus interface.

Suzuki also fails to disclose both cell-protocol traffic and packet-protocol traffic passing over a data path from a first bus interface, through lookup circuitry, through segmentation circuitry, through reassembly circuitry, and out of an integrated circuit from a second bus interface. For example, only IP datagrams pass through the IP line inputting portion 11 to the address solving portion 12 in Figure 9 of Suzuki. Similarly, only ATM cells pass through the ATM line inputting portion 21 to the address solving portion 22 in Figure 10 of Suzuki.

The additional lookup circuitry analysis and information outputting features recited in claim 1 further distinguish claim 1 over Suzuki.

Rejected claims 2 to 5 depend from claim 1 and thus similarly distinguish over Suzuki.

Regarding independent claim 11, the Office Action asserts on page 4 that Suzuki discloses an exchange apparatus for exchanging data between an ATM network and IP network

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comprising elements as shown in reference to claim 1. As discussed above, however, Suzuki does not disclose the invention as recited in claim 1.

The Office Action then makes reference to Figure 5 of Suzuki, which shows a plurality of IP-ATM nodes in communication through a hybrid network, and to Figures 6, 9, 10, the Abstract, and columns 3 to 4 lines 1 to 21 of Suzuki as showing that the nodes are operable to exchange data between ATM and packet protocols.

Claim 11 of the present application, on the other hand, recites a switching device comprising a first multi-service segmentation and reassembly (MS-SAR) integrated circuit, the switch fabric, and a second MS-SAR integrated circuit.

A hybrid network of distinct IP-ATM nodes as disclosed in Suzuki cannot reasonably be characterized as "a switching device", which is recited in claim 11.

In addition, Suzuki does not disclose a switch fabric in a switching device.

The network information flow and processing features in claim 11 further distinguish the claim over Suzuki. Suzuki does not disclose a flow of network information passing into a first MS-SAR, and then through the first MS-SAR, and then through the switch fabric, and then through the second MS-SAR, and then out of the second MS-SAR, or processing the flow for the four pairs of traffic types recited at the end of the claim.

Independent claim 11, and claims 12 to 16 which depend therefrom, thus patentably distinguish over Suzuki.

Independent claim 17 recites a multi-service MS-SAR integrated circuit capable of processing, in a data path, a flow received from a switch fabric in accordance with a first or a second application type. An indication of an application type is present in the flow as the flow is received onto the MS-SAR, the MS-SAR locating the indication and processing the flow in the data path in accordance with the application type indicated in the indication. No such different processing of a traffic flow in the same data path has been disclosed in Suzuki. The converting portions shown in Figures 9 and 10 of Suzuki represent different data paths.

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Rejected claim 18 depends from claim 17 and similarly distinguishes over Suzuki.

It is thus respectfully submitted that independent claims 1, 11, and 17, as well as rejected claims 2 to 5, 12 to 16, and 18 which depend therefrom, patentably distinguish over Suzuki for at least these reasons. It should be noted, however, that each of the features noted above individually and independently patentably distinguishes the rejected claims over Suzuki, and accordingly any single distinguishing feature would be sufficient to demonstrate patentability of the invention as claimed over Suzuki.

The remaining claims 6 to 10 and 19 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in combination with other cited references.

In respect of claims 6 to 8, claim 6 was rejected as being unpatentable over Suzuki in view of Lemieux (United States Patent 6,631,128) and claims 7 and 8 were rejected as being unpatentable over Suzuki in view of Kao (United States Patent 6,535,513). However, the rejection of these claims based on obvious is predicated on Suzuki having allegedly disclosed all of the limitations of the parent claim, which is independent claim 1. Since Suzuki does not in fact disclose all of the limitations of parent claim 1, reconsideration and withdrawal of the rejection of dependent claims 6 to 8 are respectfully requested. Neither Lemieux nor Kao remedy the above-noted deficiencies of Suzuki, and thus claims 6 to 8 patentably distinguish over the cited references.

The rejection of claim 19 as being unpatentable over Suzuki in view of Suzuki '736 (United States Patent 5,796,736) is similarly predicated on the alleged disclosure of all limitations of parent claim 17 in Suzuki. The deficiencies noted above in connection with claim 17 remain in the combination of Suzuki and Suzuki '736, and thus claim 19 patentably distinguishes over the cited references.

Regarding independent claim 9, page 9 of the Office Action asserts that Figures 9 and 10 of Suzuki disclose a data path for handling both cell and packet data received at an inputting portion. This, however, is not the case as discussed in detail above.

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The Office Action then correctly notes that Suzuki does not explicitly show segmentation trailer generating means or checking means which have been recited in claim 9. Dowd (United States Patent 6,615,358) is relied upon as disclosing a segmentation trailer in the form of a flow tag. However, Dowd does not disclose a data path for handling both cell and packet data, and thus the combination of Suzuki and Dowd does not render the invention recited in claim 9 obvious. The cited references do not teach at least this claimed feature.

Claim 10 depends from claim 9 and similarly patentably distinguishes over the cited references.

It is therefore respectfully submitted that claims 1 to 19 are allowable over the cited references, and early action to this effect is earnestly solicited.

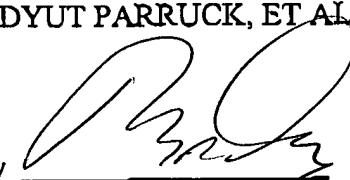
As it is believed that the claims are allowable over the cited references, this opportunity has been taken to correct apparent typographical errors at the end of claim 9, by replacing a comma with a period, and in claim 10, by deleting one occurrence of the term "checking".

In view of the foregoing, early favorable consideration of this application is earnestly solicited.

Respectfully submitted,

BIDYUT PARRUCK, ET AL

By



Ralph A. Dowell  
Reg. No. 26,868

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